

"This effort to connect the Great Lakes and Mississippi watersheds has not been without controversy." Circuit Judge Diane Wood (2011)

LAKE MICHIGAN WATER DIVERSION: A BRIEF LEGAL HISTORY

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Explanatory Note: This article is written for non-lawyer readership as far as possible. I have therefore tried to avoid legalistic terminology that may be obscure to lay readers. I have tried to avoid the heavy footnoting that characterizes most legal scholarship, and to limit the footnotes, for the most part, to citations to source materials contained in this library, using their number and letter designations, such as "1G7."

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A. Introduction

The United States Supreme Court has been no stranger to interstate water disputes. These have by no means been confined to the waters of the Great Lakes. Just to cite a few examples, the Court in 1902 in *Kansas v. Colorado* dealt with a dispute between those states over the waters of the Arkansas River. In 1931 it decided *New Jersey v. New York*, involving the Delaware River. And it has several times needed to deal with the controversies between Arizona and California regarding apportionment of Colorado River water.

Three things set the Great Lakes water disputes somewhat apart from the others. The first is the frequency with which the states have had recourse to the Court over what states and municipalities can do *with* the Great Lakes water, or *to* that water. These disputes have occupied the Court at least seven times since 1900, and they are still ongoing today. The second special feature lies in the fact that twenty percent of the fresh water in the world is located in the Great Lakes, making those waters particularly attractive to those who need water, especially in the drought-prone country that the United States has now in many areas become, but drawing resistance from the several states and Canadian provinces that touch these waters to any diversions not strictly necessary.¹ The third factor making these disputes somewhat unique is the diversity of interests underlying the disputes: public health, shipping, fishing, electric power generation, and recreational uses. Which of these interests was dominant in one or another phase of this long story is a difficult question to answer, and one which I will generally avoid.² Some of the cases have involved only one

¹ See map of the Great Lakes, [1A1](#), and their large drainage basin, [1A2](#).

² Some commentators have asserted that the main force driving Illinois to construct the drainage canal and divert into it water from Lake Michigan was not wastewater removal but the financial lure of hydroelectric power generation. See, e.g., Herbert H. Naujoks, *The Chicago Water Diversion Controversy*, 30 *Marquette L. Rev.* 149 (1946) (arguing that revenue from the

of these interests, such as public health, but these have still involved conflicting contentions, such as health of the people of one state versus the health of those in another. Other chapters in these disputes have involved conflicting kinds of interests, such as aiding the public health of residents of Chicago by using Lake Michigan water as "flush water" to take away Chicago's human and industrial wastes, versus injuring commercial shipping interests of the other lake states by the consequent lowering of their harbors.

Complicating these conflicting state interests is the variability of the weather. Rain has often played a major role, since some of these cases would not have arisen at all if the weather had always been "normal." However, it has not always been so, but has seen dry years and wet years. In a wet year prevention of flooding in one region by artificial means could cause a lessening of hydroelectric power generation in others places. In a dry year the lake harbors tend to be lower, limiting shipping. The entire mosaic of this story is thus one of balancing legitimate concerns when not all of them can be served simultaneously and where the weather is an unnamed and uncontrollable player.

By far the most contentious subset of these disputes has had to do with diversion of Lake Michigan water by Chicago for use as flush water, as above mentioned. This set of issues has occupied the attention of the Supreme Court for nearly a century, and continues to the present day. These difficulties trace their origins to the middle of the nineteenth century, when Chicago, situated in a poorly drained land area but also one of the country's largest industrial cities and experiencing rapid growth both of industry and population, noticed an increasing incidence of cholera and typhoid fever. These water-borne diseases were quickly traced to the city's water supply, Lake Michigan. The lake was polluted. The nineteenth century was an era where virtually no wastewater treatment methods were employed anywhere in the United States. It was thought that the law of gravity would solve sewage problems by taking wastewater away to some body of water -- ocean, river, or lake -- where it would cease to be a source of concern.

In the mid-nineteenth century Chicago, while still adhering to the let-gravity-take-care-of-it approach, had managed to accomplish, at least partially, a larger version of that approach: Instead of sending the wastewater via the Chicago River into Lake Michigan, reverse the course of the river at least under normal weather conditions, and use the recently built Illinois & Michigan Canal to send the waste westward into the Illinois

Lockport hydroelectric power station was the main force behind the Illinois position on lake water diversion).

River at a point 96 miles southwest of Chicago's lakefront,³ and then another 223 miles to the Mississippi. The canal had been built largely by the Illinois state government, financed by state bonds, in order to provide a navigable water connection between the Mississippi River and the Great Lakes, via the Illinois River. The Illinois River originated some 90 miles southwest of Chicago and flowed westward into the Mississippi, so a canal connecting the Illinois to Chicago could provide the desired navigation route. The canal opened in 1848, and to a large extent it made Chicago into a major commercial city; but it was short-lived for shipping purposes due to competition from the railroads. Nonetheless, by the 1860s Chicago had gradually begun using the canal to solve its growing wastewater problems, by pumping lake water and the waste-laden Chicago River water westward through the canal into the Illinois River at La Salle, and thence to the Mississippi. The hope was that over such a long water traverse the pollutants would be purified out of the rivers before reaching the Mississippi. It turned out to be a rather sensible plan, subject to two main provisos: (1) The water entering the Mississippi would in fact be clean enough to not present health problems; (2) sufficient "flush water" would need to be taken from Lake Michigan and pumped through the canal to move all the human and industrial waste of the large Chicago metropolis through the canal and into the Illinois River. This second proviso proved especially troublesome in periods of heavy rains. There was not enough pumping capacity to handle the rain-swollen river, and the I&M canal was too narrow and shallow to accommodate the combined volume of rain runoff, wastewater, and flush water. Thus, while an off-and-on reversal of the Chicago River was actually accomplished in the mid-nineteenth century, in rainy times the river, laden with sewage, would again flow eastward into Lake Michigan. The Chicago River, the canal, and the Illinois River below it, remained sluggish, and all became grossly polluted. A bigger and better solution would be needed.

With regard to the drinking water supply, things were not much better with the part-time reversal of the Chicago River via the I&M Canal in the mid-1800s. Epidemics of water-borne diseases continued to break out. One solution, the prevalent thinking until about 1890, was to move the drinking water intake farther out in the lake; surely, it was thought, the pathogenic bacteria in the sewage would then not be able to migrate two miles out into the lake and infect the water supply. That was of course quite incorrect in the longer term, and the problems continued.

By the end of the nineteenth century a much bolder solution was envisioned by Chicago and Illinois: A new and much wider, deeper, and shorter canal might be built, and the

³ See the Map of the Illinois & Michigan Canal, [1A3.1](#).

volume of flush water significantly increased. There was apparently some thinking at the time that since the state line of Illinois extended out to the middle of Lake Michigan,⁴ Illinois could draw as much water as it pleased from its part of the lake. In 1889 the Illinois legislature passed a law authorizing the creation of a sanitary district within any Illinois county if the county's voters approve.⁵ Importantly, if a district was created, the statute required that if any sewage-discharge channel built by the district were to convey sewage to some river outside the district, the channel would have to be constructed to handle at least 200 cubic feet of liquid per minute for every 1,000 residents of the district. For the Sanitary District of Chicago, formed under this act in the following year, 1890, with an existing population of 1,100,000, this meant building a canal that could then handle a flow of 300,000 cubic feet per minute, or 5,000 cubic feet per second. If a canal were to be built between Lake Michigan and the Des Plaines River (some 10 to 25 miles to the west, depending on the point of intersection), the act required that it be constructed to handle at least 300,000 cubic feet per minute for the then-existing population, and that if the population grew, "at all times" the channel would somehow have to handle a proportionately larger flow. This was indeed an engineering challenge, but that was not all. The act further provided that if and when the federal government completed its part of an improved waterway linking the Great Lakes to the Mississippi (something that had in fits and starts been in the works for several decades), and if the new waterway could accept 10,000 cubic feet per second of output from the Chicago drainage canal, then the District must *within one year* thereafter "enlarge the entire channel" to handle that amount, double the initial mandate, regardless of the District's population. A daunting prospect indeed.

To get a feel for how much water we are speaking about, a flow of 5,000 cubic feet per second means extracting 3.2 billion gallons every day from the lake. Since all the Great Lakes except for Superior are interconnected, an extraction from one eventually means a lessening in all. One can see how this might create problems for others around the lakes, and why Wisconsin, Michigan, Minnesota, Ohio, Pennsylvania, New York, Indiana, and two provinces of Canada all became involved in the cases. It is said that it is an ill wind that blows no one good, and another group of states, those along the Mississippi, saw their interests as aligned with those of Illinois and intervened in several of the cases to

⁴ Maps of the United States usually give the impression that the state boundaries of Wisconsin, Illinois, Indiana, and Michigan extend only to the shore of Lake Michigan. This is quite incorrect. The coordinates given in the congressional enactment by which Illinois entered the union, [1A6](#), shows that Illinois extends eastward to the center of the lake and Michigan extends west to the same line. See also the correct state lines shown in the map at [1C2](#).

⁵ [1A7](#).

assert their views. Except for an early health-based skirmish between Missouri and Illinois, the river states generally saw it to their commercial advantage to have the water level of the Mississippi -- and of their harbors -- raised by the large effluent from Chicago drainage canal.

The Sanitary District of Chicago has had its name changed two times. Since 1989 it has been the Metropolitan Water Reclamation District of Greater Chicago. We will refer to it here by its old name, the Sanitary District of Chicago, or just the Sanitary District, as the courts have done over the years of these controversies. The Sanitary District's work on the drainage canal began in 1892, and in 1900 it opened as what was officially called the Chicago Sanitary and Ship Canal, which initially ran from Damen Avenue in Chicago to Lockport, Illinois, on the Des Plaines River, some 35 miles to the west.⁶ From there the flow was down the Des Plaines to its confluence with the Kankakee River, forming the Illinois River near Channahon, a distance of 65 miles. Initially, the only controls for flow for the drainage canal were two gated structures near Lockport. The eight-year construction of this huge canal is dramatically described in *Building the Canal To Save Chicago*, by Richard Lanyon, the recently retired director of the Sanitary District who spent forty-eight years working for the District.

Additional statutory authority in 1903 enabled the district to extend the canal at Lockport and build a hydroelectric generating plant and navigation lock, which went into service in 1908. The 1903 act also enlarged the territory of the district allowing the construction of the North Shore Channel, from Lake Michigan at Wilmette to the North Branch of the Chicago River in Chicago. Two miles of the North Branch were also improved during the first decade. Chicago's other river, the Calumet River, also discharged to Lake Michigan and after the turn of the century as development of the Calumet area progressed, steps were also taken to reverse its flow by construction of the Calumet-Sag Channel from the Chicago Sanitary and Ship Canal near Lemont, Illinois, 16 miles east to the Little Calumet River near Blue Island, Illinois. Construction took 11 years from 1911 to 1922.

Other additions and improvements over the years led to what is now called the Chicago Area Waterways System, or CAWS. Counting the Chicago River, its branches and the Calumet branches, the System is a 77-mile network of artificially controlled canals and modified rivers, 56 of which are human-made. The CAWS is part of the Illinois Waterway, a federal navigation project stretching from Lake Michigan to Grafton, Illinois, at the confluence with the Mississippi River. The CAWS also constitutes the

⁶ See map, [1A5](#).

Lockport pool, one of eight pools controlled by lock and dam structures on the Illinois Waterway. CAWS now handles effluents from wastewater treatment plants along the canal, but also has considerable shipping tonnage to and from the Mississippi and serves as a major flood-control outlet for many Illinois communities in wet weather. However, as now Chief Judge Diane Wood of the U.S. Court of Appeals for the Seventh Circuit had occasion to comment during one of the recent Lake Michigan battles among the states, "This effort to connect the Great Lakes and Mississippi watersheds has not been without controversy."⁷ We shall now visit these controversies.

B. The First Battle: Health of Chicago Or Health of St. Louis? (1900-1906)

The Chicago drainage canal opened in early January 1900. Within days of the opening Missouri filed a bill of complaint in the Supreme Court against Illinois and the Sanitary District of Chicago, seeking an injunction against putting any sewage into the canal. Missouri contended that Chicago was planning to send daily "fifteen hundred tons of undefecated sewage and filth" into the Mississippi River, some 40 miles upstream from St. Louis, and that this would "pollute and poison the said water of the Mississippi River to such an extent as to render it unwholesome and unfit and unhealthful for use for drinking by the said inhabitants" and "unfit for use for watering stock and for manufacturing purposes."⁸ Illinois demurred,⁹ mainly on the ground that the harm alleged was not on the State of Missouri but, if on anyone, only on residents and businesses along the Mississippi and in a fairly short stretch below the outlet of the Illinois at Grafton.

The Court was in no hurry to reach the serious injunctive issue, perhaps because Missouri had delayed its action through the eight years of construction of the canal. The canal opened as scheduled in January 1900. The Court ruled on the demurrer the following year, overruling it, with three justices dissenting. The Court majority took the view that damage to the public health of a substantial segment of a state's population was a legal injury to the state itself, such that Missouri could maintain this original action in the Supreme Court. With the demurrer overruled, Illinois would now need to answer the complaint, but the canal and its contents were now in full flow.

⁷ [1M5](#), pdf 2. For the convenience of readers, page citations herein will generally refer to pdf page numbers of the items in this library, rather than to the legal reporter page number.

⁸ [1B1](#), pdf 4.

⁹ For non-lawyer readers, a demurrer basically says that the complaint on its face is faulty, without the need of any evidence coming from the defendants. Here the contention was that Missouri, as a state, was not being injured by the canal effluent, even if it was a noxious as the complaint indicated.

The case was argued on the merits over three days in January 1906, with a decision following just a month later. By this time Missouri had of course amended its bill of complaint to assert that the great public health harms predicted in its initial filing had now come to pass. The Supreme Court, however, found the evidence insufficient to establish causality between the Illinois effluents and any ill effects on the health of Missouri citizens. The Court's opinion, by Justice Holmes, is a short one, printing out at only seven pages.¹⁰ Its impact, however, and the issues addressed, were destined to be profound. Holmes said that if these states were nations the present dispute could well lead to a war. The Supreme Court was being thrust into the role of ultimate decider of a sanitary engineering issue. But where was the underlying substantive law to be found? There was no applicable act of Congress at this juncture, and obviously neither of the contesting states could write laws that would bind the other. Public nuisance -- presumably derived from the common law -- was the law chosen here. Justice Holmes went out of his way to emphasize that a high level of proof was going to be needed for Missouri to succeed. Holmes saw several reasons for the high burden of proof: The Supreme Court was the both the first and the last forum for this dispute; and the disputants were sovereign states. His opinion for the Court said: "Before this court ought to intervene the case should be of serious magnitude, clearly and fully proved, and the principle to be applied should be one which the court is prepared deliberately to maintain against all considerations on the other side."

Here the question of whether great rivers were to serve as sewers for cities along their banks or to be protected against everything that threatens their purity was a question "of the first magnitude." The evidence needed to be very clear for the Court to intervene. In fact it was far from clear. The unaided senses -- sight and smell -- could find no deterioration of the Illinois River as compared to what it was before the heavy influx of a mix of sewage from Chicago and clean water from Lake Michigan. If anything, the Illinois was cleaner, and edible fish had returned. Missouri's only real evidence of public health problems was that typhoid fever had increased along Missouri's own Mississippi banks. No past medical instance of a disease coming from the distance complained of here (357 miles) was known. The number of typhoid deaths in St. Louis was running higher after the Chicago canal opened in 1900 than in most prior years, but there was nothing definitively linking the increase to Chicago's sewage. Moreover, no such deaths were seen along the banks of the Illinois, as would have been expected if Chicago were really the source of the contagion. There were indications that the trouble may actually

¹⁰ [1B2](#).

have come from the Missouri River, which was in worse condition than the Illinois. In short, the present evidence failed the stringent test adopted by the Court for cases between sovereign states. Missouri's case was dismissed.

C. The First Opposition To the Lake Water Diversion: Health of Chicago Citizens v. Maritime Commerce of the Lake States (1913-1925)

New factors, quite apart from the health of citizens of neighboring states, were now to confront Illinois and the Chicago Sanitary District. The Great Lakes were, and still are, major U.S. shipping lanes through to the St. Lawrence Seaway and the Atlantic Ocean. Of the fifty highest-tonnage U.S. harbors, eight are located on the Great Lakes.¹¹

As Chicago continued to draw large quantities of water from Lake Michigan as "flush water" for its sewage in the period following opening of the Chicago drainage canal in 1900, the water height in the other Great Lakes, except for Lake Superior,¹² started to go down. The harbors of Wisconsin, Michigan, Ohio, Pennsylvania, New York, and their Canadian counterparts, saw their harbors drop several inches over the first two decades of the twentieth century. While this does not sound like much, it made a considerable difference in shipping capabilities. For every inch of lower harbor, 90-100 tons less freight burden could be carried by a given vessel on a given voyage. Hence more vessels or voyages would be needed to transport the same amount of freight, driving up shipping costs. Shippers naturally considered their alternatives -- rail, or even a possible Mississippi River route.

As Chicago kept growing, and with no full-size sewage treatment plants in place as late as 1920, it appeared there would be no end to Chicago's increasing need for lake water to move its wastes westward through the drainage canal and ultimately into the Mississippi. The eastern states were distressed by the situation, as was the federal government for different reasons. Since the 1840s Congress had fostered the creation of a waterway

¹¹ These are, in tonnage order, Duluth (#18), Chicago (#36), Two Harbors, Minnesota (#41), Detroit (#42), Cincinnati (#43), Cleveland (#47), Toledo (#48), Indiana Harbor (#49). Source: *U.S. Port Ranking By Cargo Volume 2010*, U.S. Army Corps of Engineers, Waterborne Commerce Statistics Center, [1L21](#).

¹² Lake Superior, situated at the head of the Lakes and having the highest water level, was unaffected by withdrawals from Lake Michigan. The other Great Lakes are all interconnected by navigable rivers, so that a withdrawal from one lake affected all the lakes below it. See maps, [1A1](#) and [1A2](#).

between the Great Lakes and the Mississippi, with a series of enactments and appropriations to aid Illinois in enlarging the Illinois and Des Plaines rivers and improving the port of Chicago. There were, however, limits to the federal generosity. The Rivers and Harbors Act of 1899, while providing appropriations for many of the country's waterways pursuant to the commerce clause, also contained restrictions, the most pertinent here being in Section 10 of the act:

[I]t shall not be lawful . . . in any manner to . . . modify the . . . condition, or capacity . . . of . . . any . . . lake . . . of the United States . . . unless the work has been recommended by the Chief of Engineers [of the Army Corps of Engineers] and authorized by the Secretary of War prior to beginning the same.

Did this mean that the Chief of Engineers and Secretary had power only to preserve good navigability? Or was it a broader authority, conferring plenary discretion under the full breadth of the commerce clause upon those officials to modify the nation's waters? This question was to occupy the federal courts for nearly a century.

The main Supreme Court case on the issue, commenced by the eastern lake states in 1922, has been before the Court five times and is still open at the time of this writing (January 2014). The prelude, however, involved water withdrawals beyond the amounts stated in the Secretary's permits, thus skirting the question of the full extent of the Secretary of War's powers. It began in the lower federal courts in 1913, with a district court suit by the United States against the Chicago Sanitary District. The Secretary in 1899 granted permission to open the new drainage canal connecting Lake Michigan with the Des Plaines River at Lockport some 28 miles to the southwest, with a flow of 300,000 cubic feet per minute (cfm). In 1901 Secretary Elihu Root ordered the flow reduced to 200,000 cfm during daytime hours, and later in that year authorized a flow of 250,000 cfm at all hours. It should be understood that local rain runoff and sewage, plus the very sluggish Chicago River, could not deliver anything like this quantity, so virtually all the flow would need to come from Lake Michigan. Over the next several years, authorizations varied between 250,000 and 350,000 cfm. When the Calumet-Sag channel was added to the canal, from the south of Chicago and angling into the main channel about halfway to Lockport (permission for which had been refused by Mr. Secretary Taft, the former president and later the chief justice, in 1907 but granted by a later secretary in 1910), the total flow was constrained to 250,000 cfm or, to use the simpler equivalent in

cubic feet per second, 4,167 cfs, considerably less than Chicago's perception of its own needs and less than the amount mandated by the state law.

By 1912 Chicago's population had grown to exceed 2.5 million. As mentioned above, the state's 1889 enactment creating the District and authorizing the drainage canal specified that the canal's capacity must always stay proportional to population, and this would now require a withdrawal of 10,000 cfs. Permission for this amount was sought but rejected by Secretary of War Stimson in 1913, mainly on the ground it would lower the lake levels to such an extent to cause undue interference with navigation. The District exceeded its allowed quantity, and attempted to support the violation by reference to the state law. The United States commenced its district court case on October 6, 1913, but the case languished there -- perhaps for political reasons centering on Chicago's sewage-disposal needs -- until an oral opinion in favor of the government came down in 1920. The judge then resigned prior to finalizing a judgment, a task accomplished by his successor in 1923. The District appealed to the Supreme Court.

Justice Holmes again wrote for the Court.¹³ He mentioned only briefly the unresolved question of whether the Secretary was empowered by Congress to consider factors beyond navigational needs in reaching a decision on permitting water diversion. That question did not need to be decided yet, because it was clear that the Secretary's permission, however based, had been exceeded by the District. Holmes made short shrift of the District's reliance on the Illinois enabling statute. The supremacy clause of the United States Constitution meant that the federal law needed to be obeyed, notwithstanding any conflicting requirements of the Illinois statute. The District was ordered to reduce its diversion from Lake Michigan to the authorized level within sixty days, "without prejudice to any permit that may be issued by the Secretary of War." Thus the case between the federal government and the Sanitary District ended in January 1925, leaving open the question of the existence and extent of the Secretary's non-navigation-based diversion authority.

Interestingly, the Court allowed many other states to intervene in the case as amici curiae. These included those later referred to as "the lake states," Wisconsin, Minnesota, Indiana, Michigan, Ohio, Pennsylvania, and New York; and those called the "Mississippi Valley States" or the "river states." The latter group were motivated by the reverse effects to their harbors: the more water sent through the Chicago drainage canal to the Mississippi, the better for the harbor water heights, and shipping interests, in the ports along the

¹³ [IC1](#).

Mississippi. These river states included Illinois's former adversary, Missouri, who now saw her interests more aligned with those of Illinois than with those of the lake states.

D. Wisconsin v. Illinois and the Companion Actions: Continuing Battle Between Health and Lakes Shipping; Chicago's Sins; Possible Limits on the Secretary of War's Powers (1925-1930)

Two months later, in March 1925, with the ink hardly dry on Justice Holmes's January opinion for the Court sustaining the government's case against the Sanitary District but expressly leaving open the possibility of a new permit, the Secretary of War increased the District's authorized withdrawal of lake water from 4,167 cfs, nearly doubling it to 8,500 cfs as an annual average, with certain conditions, to be discussed later herein. "Without prejudice" in the Holmes opinion thus turned out to be a phrase not of mere legal formality, but one of very serious consequence. The secretary's new permit set in motion a series of interstate conflicts that was to last down to the present day. Wisconsin, which had sought to block the Illinois withdrawals by an original action in the Supreme Court in 1922 but which the Court seemed to hold in abeyance, now filed an amended original bill in the Court, asking to block all diversion of lake water by Illinois except that needed for drinking water (termed "domestic pumpage") and navigational needs.¹⁴ Minnesota, Ohio, and Pennsylvania joined the new action by permission. Michigan and New York filed separate actions shortly thereafter, and these were consolidated for coordinated treatment by the Court. Illinois, joined by intervenors Missouri, Tennessee, Kentucky, Louisiana, Mississippi, and Arkansas, at first demurred, apparently on the ground that the federal government and courts had no authority over the diversion of water lying under land within the state's borders. This demurrer was overruled, and the river states answered, invoking the diversion permission given to Illinois by the Secretary of War.

The case was obviously of great importance, pitting one large section of the country against another. The cast of players involved in the case was extraordinary. The chief justice at the time, the one destined four years later to write the Court's opinion limiting the Illinois diversion, was former President William Howard Taft. Between his

¹⁴ Wisconsin's bill sought alternatively to outlaw completely any permanent diversions of lake water by Illinois. (Domestic usage would be regarded as nonpermanent if the wastewater were returned to the lake, as most Great Lakes communities did and as Chicago did until the I&M canal and later the drainage canal were used for flush water.) This request was never given serious consideration by the Court.

presidency and his appointment as chief justice Taft had served as secretary of war in the Theodore Roosevelt administration. One of his decisions in that role had been to deny a permit to Illinois for increased water diversion. Among the lawyers for Wisconsin in the 1925-filed case was Newton D. Baker of Cleveland. Like Taft, Baker was also a former secretary of war, having served in the Wilson administration throughout World War I. As such he was responsible for permitting or refusing to permit lake water diversions. The special master chosen to hear the evidence in the case and to make recommendations to the Court was the renowned Charles Evans Hughes. Hughes, a former governor of New York and a highly respected lawyer, had been an associate justice of the Supreme Court from 1910 to 1916, when he resigned from the Court to accept the Republican presidential nomination in 1916 to run against Wilson's second term, narrowly losing the election.¹⁵ In 1921 he was tapped by President Coolidge to be Secretary of State, a post he held until 1925. After returning to private law practice for a year, Hughes was appointed by his former colleagues on the Supreme Court to be special master in the water diversion cases, to hear relevant evidence and make recommendations to the Court for disposition of the cases. (Probably unforeseen at the time, Hughes was destined five years later to succeed Taft as chief justice, a role in which he would again grapple with the Lake Michigan diversion controversies.)

Hughes's first report as special master¹⁶ is one of the great documents of legal history, tracing all the congressional and state happenings from nearly a century before, including many Supreme Court decisions on congressional power under the commerce clause and its application to navigable waters, up to the time of the lake water disputes now before the Court in 1926 and succeeding years. In his 1928 report to the Court Hughes found, after an exhaustive analysis of the technical evidence, that because of natural annual fluctuations in the lake levels due to unpredictable amounts of rainfall and evaporation, it was very difficult to determine how much reduction of the levels was caused by the Chicago diversion of 8,500 cfs as authorized by the Secretary of War's 1925 permit. The states' conflicting contentions were somewhere between four and six inches at Lakes Michigan and Huron, and somewhat less at the lower lakes. Hughes concluded, as contended by the lake states, that the best estimate of the diversion going forward was six inches of lowering at Lakes Michigan and Huron, and five inches at Lakes Erie and Ontario.¹⁷ In allowing such a lowering, with its detrimental effect on navigation in those lakes, Hughes opined that Congress had empowered the Secretary of War to use his own

¹⁵ Hughes garnered 254 electoral votes to Wilson's 277.

¹⁶ [1D2](#).

¹⁷ Id. at pdf 57.

judgment about the waterways, not only for strictly navigational needs but for the full range of factors affecting navigation, including not only these lowerings but also the counter-detriments to navigation that would occur by failing to provide adequate flushing through the drainage canal: Increased risk of sewage ending up in Lake Michigan; the virtual shutdown of the port of Chicago due to sewage accumulation there; unpleasant odors or views and increased pollution as possible detriments to usage of the lake harbors for shipping; and many other factors.¹⁸ The permission of 1925 was therefore not arbitrary, but carefully considered, and with a legitimate connection to navigation.

Most presciently as things have turned out, Hughes said that to allow the lake states to override the Secretary's order would effectively place the Court in the position of administrator of the lake waters, probably for many years to come, a situation he thought Congress could not have intended. He recommended dismissal of the lake states' bills.

Hughes's former colleagues on the Court did not see it that way, and in rejecting Hughes's recommended dismissal of the cases it placed itself as de facto administrator of the Great Lakes for decades to come. The Court's opinion was by Chief Justice Taft, who, it will be recalled, as Secretary of War two decades earlier had rejected the Sanitary District's application to build the connecting canal known as the Cal-Sag channel.¹⁹ While expressing himself in deferential terms toward the special master, thanking him for his great help on the case, Taft opined that the Secretary's permit of 1925 was based only on a sewage-riddance function, not the regulation of navigation of commerce on Lake Michigan, and that sewage disposal was a state, not a federal, function. The purpose of the 1899 federal law was to commission the Secretary of War to prevent and remove unreasonable obstructions to navigation, not to destroy or limit navigation by authorizing water diversions, even though without such diversions the port of Chicago might be rendered useless for navigation due to sewage accumulation. This last factor, Taft said, justified a temporary permit a number of years back, but all the issued permits had

¹⁸ Among these was the diversion's positive effect on navigation in the Mississippi. Although the issue was pressed by the intervening river states, Hughes for the most part stayed out of the complexities entailed in trying to weigh the commercial benefits. He found that the diversion's effect at Grafton, where the Illinois flowed into the Mississippi, was a raising of 1-2 feet, at St. Louis 6-12 inches, and at Vicksburg 2-5 inches. [1D2](#) at pdf 67.

¹⁹ This connecting waterway, as above described, was later authorized by a later Secretary of War and was opened in 1922. It is called the Cal-Sag channel because it originates at the Calumet Rivers south of Chicago and flows past the land called the Saganashkee Slough, a large swampy area historically sometimes used for canoe passage from the Des Plaines to Lake Michigan (thereby connecting the Mississippi to the Great Lakes) by traders in colonial times in lieu of portage, if the weather was wet enough.

conditions attached, one of which was that Chicago must work to develop sewage treatment facilities, so that the city and District would not need so much lake water to dispose of their wastes.

Taft conceded that some flow from the lake was needed to maintain navigability of the Chicago River, but this amount was negligible in comparison with the amount authorized by the 1925 permit and now being drawn by the District. The secretary's permit was valid only as to this smaller amount and invalid for the remainder as being based solely on non-federal considerations: (i) sewage removal and (ii) electric power generation at Lockport, using the drainage canal's water. Chicago, having brought about the sanitary crisis by its own failure to develop sewage treatment facilities, should not now be allowed to invoke the federal authority to help the city by taking huge amounts of water from the lake, to the detriment of other states' interests.

Having thus laid down the law against Illinois and the Sanitary District, Taft now softened his tone somewhat, as courts of equity sometimes do, puzzling over the proper framing of an injunctive decree that would limit diversion but would not be catastrophic to the health of Chicago's citizens. The decision:

The situation requires the District to devise proper methods for providing sufficient money and to construct and put in operation with all reasonable expedition adequate plants for the disposition of the sewage through other means than the Lake diversion.²⁰

How to determine just what sewage treatment measures the District needed to take? And to decide the time required? Taft viewed this as beyond what the Court could itself realistically take on. The Court would instead re-refer the matter to Hughes as special master, this time asking him to look into "the questions indicated" and "with all convenient speed" report his conclusions and a form of decree. Nowhere in the opinion is it mentioned that Hughes's bottom-line recommendation the first time around had been for dismissal, and that the Court was rejecting that resolution in favor of taking on the judicial administration of the Great Lakes waters.

E. The Second Hughes Report And the Decree of 1930: Chicago Is Given A Timetable To Clean Up Wastewater, Reduce Lake Diversion

²⁰ [1D3](#) at pdf 15.

Between January and October of 1929 former Supreme Court justice and now special master Charles Evans Hughes again heard testimony and received exhibits, this time on the questions now posed to him by the Court's January 1929 decision: What measures should Illinois and the sanitary district be obliged to take regarding sewage treatment so as to reduce their need for lake water? And how long should it take to get such facilities up and running?

By 1929 many cities had built and placed into operation sewage treatment plants of various kinds. The two primary technologies were the older and slower Imhoff Tank method and the newer and faster activated sludge method. These methods, and the patent litigation that accompanied the activated sludge approach, are the subject of the second library on this site. Suffice it here to say that both methods rely on the somewhat counterintuitive idea that bacteria in the sewage can and should be put to work as the agents of purification of that sewage. The Imhoff approach utilizes anaerobic bacteria (those that thrive in an oxygen-starved environment and are killed off by any significant amounts of oxygen, such as in the air). The activated sludge approach puts to work aerobic bacteria, i.e., those that thrive and multiply on exposure to copious amounts of oxygen or air. Raw sewage contains both kinds of bacteria, and each treatment method has the ability to break down organic compounds in the sewage, rendering it largely clean and harmless, but at different rates of speed. Speed is critical for large cities, because a treatment plant of a given construction can handle only so many gallons of wastewater per minute or per hour. If the treatment takes too long to accomplish its goals, either the incoming wastewater will have to back up, causing obvious difficulties, or the effluent will be only partially treated. The faster the treatment method, the sooner the clean effluent can be discharged. Such a plant can obviously handle more incoming waste. The ensuing 83 years following the Court's decree in this case have shown the aerobic approach to be much faster and hence more suitable for large cities with large daily amounts of sewage to be treated.²¹

Hughes, in characteristic fashion, went straight to work on his second assignment from the Court. In his new report, dated December 17, 1929, he first noted that the standard for compliance was stated in the Secretary's 1925 permit: that Chicago must provide the

²¹ The history of activated sludge treatment method will be taken up in more detail in Library 2, in connection with the patent infringement cases against Milwaukee and Chicago.

equivalent of 100% treatment²² for a population of at least 1,200,000. In other words, it need not be perfect. Chicago's population was already over 2,500,000, so the Secretary's requirement was for only about half the sewage to be purified by treatment. Testimony before Hughes showed that as of late 1929 Chicago plants were set (built, but not yet operational) to handle a 100% equivalent treatment for fewer than one million persons,²³ although an industrial treatment plant built by Corn Products could handle another 360,000 equivalent.

Hughes heard from experts on both sides, and called some on his own initiative. The net conclusion was that Chicago's planned major treatment plants -- North Side almost ready; West Side to be completed by 1933; Southwest addition by 1935 -- were deemed adequate by all concerned in terms of design and capacity.²⁴ A somewhat smaller plant at Calumet was already in operation. No one urged that Chicago must replace its system of combined waste-and-storm sewers with separate sanitary sewers as in some other cities, as the costs would be too great.²⁵

The big issue was time. Here the experts were far from any agreement. Some of the treatment plants were already operational, and others, especially the North Side plant, nearly so. However, the very important Southwest Side plant had not even been designed yet. Langdon Pearse, a highly regarded engineer working for the sanitary district, testified that fifteen years would be needed for completion of all the planned facilities, "assuming that everything was to go right and the money was readily forthcoming." Harrison Eddy, an independent expert of high credentials in the field, estimated 13-15 years, conceding that work of this kind is subject to many unforeseeable problems. He opined that tightening the time constraints would not only increase costs, it would also decrease the eventual quality of the facilities. The lake states' expert, Howson, thought five or six years should be enough. Some other witnesses agreed.

²² The parties agreed that 100% purification is not actually achievable. Experts testifying before Hughes agreed that this was a theoretical figure, used only for comparisons. At the time, 85% was approximately the real purification level achievable under normal weather conditions. [1E2](#), pdf 16.

²³ [1E2](#) at pdf 6, 16-17.

²⁴ Id. at pdf 9-11.

²⁵ As history was to unfold down to this day, rainwater running through the treatment plants in very wet times would pose larger problems than the treatment of sewage. The plants and the drainage canal have fixed capacities, leading in heavily rainy weather to backups and pouring of some raw sewage, mixed with rainwater, into Lake Michigan. See Lanyon affidavit, [1L5](#) at pdf 8-9.

Hughes's report on re-reference broke the program down to its component facilities and analyzed the evidence separately for each. The most troublesome was the Southwest Side plant, which was to be the largest of all. It was to handle a large portion of the city's industrial waste, normally about one-fourth of the total in terms of gallons but more than that for the Southwest facility. Despite the immediate absence of even a design, Hughes concluded it could be opened in nine more years, i.e., by the end of 1938, "assuming available funds." This small phrase had permeated nearly all the testimony, and one gets the impression funding of the project by the district and by Illinois was a far more important factor than any technical or construction challenges involved. Lack of funds had delayed these Chicago projects before. In the very year of these hearings, 1929, testimony suggested that work on the North Side facility had been suspended due to lack of funding.²⁶ Acquisition of a land site for the Southwest facility had also been held up due to the district's lack of funds. Hughes made clear that the responsible elected officials would need to come up with the funds and get the taxpayers' blessing on the projects,²⁷ even if by so doing they might lose their seats in the next election.

Hughes also had to opine on the time needed for construction of "controlling works," such as gates at the lake entrance to the Chicago River to block sewage from flowing into the lake under normal weather conditions, and various other waterway structures. These, he concluded, should take much less time than the nine years he had concluded were needed for completing the building of the treatment plants.

Finally, Hughes considered possible further reductions of diversion after completion of all this planned construction, with the treatment plants fully operational. Illinois contended this was a question outside the power of the Supreme Court, one vested by Congress in the Secretary of War, much as Hughes had thought at the time of his first special master report. Hughes saw, however, that such was not the opinion of the Supreme Court. In its 1927 ruling it had said the complainant states were, despite the permit of the Secretary of War, entitled to injunctive relief for such portion of the currently authorized diversion that was not needed for navigation purposes and was caused by Illinois's failure to dispose of its sewage properly. In essence, he saw he had been overruled by the Court on the bottom-line question, and would now need to reach the issue of possible decreases in Illinois's diversions from the lake after Illinois took the remedial actions requested.²⁸

²⁶ [1E2](#) at pdf 25.

²⁷ [1E2](#), pdf 43.

²⁸ *Id.* at pdf 64.

The expert for the complainant, Mr. Howson, opined that even without controlling works diversion could be reduced immediately from 8,500 to 6,500 cfs, excluding domestic pumpage, with no ill effects; and that by Dec. 31, 1935 it could be set at zero, meaning no flow at all at Lockport. The canal could be closed. It is difficult to see how navigation from Lake Michigan to the Mississippi could occur at all under the Howson view of things, and naturally the Corps of Engineers disagreed with it. They recommended a reduction only to 7,250 cfs at present for navigational purposes, and with more sewage purification, a reduction to 5,000 cfs.²⁹

Hughes concluded from all the evidence and from the prior four years of experience that the near-term reduction to 6,250 cfs diversion requested by the lake states should not cause any major problems, and that that amount should be allowed until control works and treatment plants were completed. However, after completion of the needed projects, he believed diversion could be reduced to either 1,000 cfs or, to be safer, 1,500 cfs. When added to the effluent from the treatment plants into the canal (basically the domestic pumpage after it has been used, plus rainwater runoff) would be needed to maintain navigation and could be authorized in the discretion of the Secretary of War. Naturally, neither the complainant lake states nor the defendant river states were fully satisfied with the Hughes report.³⁰ The case would now return to the Supreme Court for disposition.

Hughes's report on re-reference was submitted to the Court on December 17, 1929. Less than two months later, on February 3, 1930, Chief Justice Taft retired from the Court due to ill health.³¹ On the day of Taft's resignation, President Hoover nominated none other than Charles Evans Hughes to take his place. Hughes was confirmed as Chief Justice ten days later, but for obvious reasons could not participate in the hearing of the Lake Michigan diversion case argued over two days in the following month and decided 31 days after the hearings, in an opinion by Justice Holmes.

Holmes, going straight to the central point, recited that the Court in its 1929 decision the water withdrawals by Illinois were "held illegal," but that restoration of the rights of the lake states should be gradual rather than immediate. Summing up the issues presently before the Court, Holmes was far from conciliatory to Illinois:

²⁹ Id. at pdf 48.

³⁰ See, e.g., [IE3](#).

³¹ He died on March 8, 1930, the same day Justice Sanford died unexpectedly.

It already has been decided that the defendants are doing a wrong to the complainants and that they must stop it. They must find out a way at their peril. We have only to consider what is possible if the State of Illinois devotes all its powers to dealing with an exigency to the magnitude of which it seems not yet to have fully awaked. It can base no defenses upon difficulties that it has itself created. If its constitution stands in the way of prompt action it must amend it or yield to an authority that is paramount to the State.

Reciting that "[t]he master was as liberal in the allowance of time as the evidence permitted him to be," Holmes overruled most of the objections to the Hughes report. He omitted mention of specific works, such as controlling works or the Southwest Side plant, or deadlines for their completion. These terms were in Hughes's proposed form of decree, but Hughes had said "it would not be a matter of substance to exclude" them. Apparently the Court did not want to jump into the construction management business as well as the water regulation business. Holmes reworded the diversion limit provisions recommended by Hughes, so as to exclude mention of particular facilities. The Court's decree instead said that by July 1 of that year, 1930, diversion must be reduced to an annual average of 6,500 cfs. For the later reductions, the Court decree recited that "unless good cause be shown to the contrary," diversion must be cut to 5,000 cfs by the end of 1935 and 1,500 cfs by the end of 1938, both as recommended by Hughes. All these figures were exclusive of domestic pumpage, but inclusive of runoff from the Chicago and Calumet rivers, also as recommended by Hughes.³²

Holmes particularly noted the strangeness of the lake states' demand that all flow through the drainage canal must eventually cease. Where then would the effluent from all these treatment plants go? It would have to end up once again in Lake Michigan, even though the purification effected by the treatment facilities could never be 100% effective. As Holmes put it, "we are somewhat surprised that the complainants should desire the effluent returned." That demand was rejected. Absent congressional intervention, the canal would stay open and would continue sending the effluents westward, but the lake-water diversion component of its flow would be reduced in steps as stated. To get some

³² See the decree at [1E5](#). The measurement method for diversion, also proposed by Hughes and stated in the decree, was to take the total flow at Lockport (end of the drainage canal) and subtract therefrom the volumes of water pumped by the Chicago District into its water mains. The difference would represent the amount taken from the lake and not used for domestic or industrial purposes.

picture of the amount of the seemingly small final diversion level allowed after 1938, 1,500 cubic feet per second equates to just under one billion gallons per day.³³ Domestic flow was exempted from all these limits and would represent an additional draw from Lake Michigan beyond the figures quoted here. As we shall see in later episodes of this ongoing controversy over Lake Michigan's water, the Chicago sanitary district's daily domestic pumpage at the time of the decree amounted to an additional 1,700 cfs (1.1 billion gallons) in 1930 and remained at approximately that level through 1960.³⁴ Illinois's full takeout from the lake was thus more than double the post-1938 withdrawal figure in the Court decree and exceeded two billion gallons per day. It is considerably less now. Domestic pumpage in the period 2007-2009 had been reduced to under 1,300 cfs,³⁵ and as we shall see later, the states involved were able to agree on a revision to the Court's decree so that it would embrace the totality of Illinois's flush water diversion, navigational diversion, and domestic water supply, limiting the total to an average of 3,200 cfs today.

Perhaps of equal importance to the 1930 decision against Illinois, marking the end of the state's claim of an unbounded ability to withdraw water from the lake, the Holmes opinion ended with a requirement, also recommended by Hughes, that the sanitary district must file semiannually with the Clerk of the Supreme Court a report on the progress of construction of the various treatment facilities and controlling works and the average diversion of lake water during each six-month period. Any of the parties could then apply to the Court for whatever relief might be necessary. Moreover, independently of these reports, complainants or defendants may "apply at the foot of this decree for any other action or relief, and this Court retains jurisdiction" for any further order that may be needed.³⁶ The decree limited the role of the Secretary of War to approval of the controlling works needed to prevent re-reversal of the flow of the Chicago River into Lake Michigan in wet weather. The Court thus became, for better or worse, the general manager of Lake Michigan's water, at least so far as Illinois was concerned. As we shall see, it is a role the Court retains to this day.

³³ 1,000 cfs = 646 million gallons per day.

³⁴ Maris special master report, [119](#) at pdf 49. This notwithstanding that the boundaries of the District had expanded somewhat in the interim and the population grown from 3.38 million to 3.55 million.

³⁵ U.S. Army Corps of Engineers, Lake Michigan Diversion Accounting, Water Year 2009 Report, [1L15](#), at pdf 26. The accounting estimates a 10% "consumptive use," meaning water that is withdrawn from the lake but which, due to factors like evaporation or spillage into the ground, does not reach the reclamation facilities.

³⁶ [1E5](#) at pdf 2.

F. Troubles Resume: Lake States Complain About Pace of Chicago's Construction

It did not take long for Justice Holmes's kind invitation to the states to bring forth any future problems to be acted upon by the lake states. In October 1932, Ohio, Michigan, Wisconsin, and Minnesota lodged with the Court their complaint about Illinois's slow progress in carrying out the terms of the 1930 decree. In December of that year the Court appointed Edward McClennen, a partner in the former law firm of Justice Brandeis, as special master to look into these complaints.³⁷ It will be recalled that the 1930 decree ordered only the diminutions of water diversion by specified dates, and omitted any command, or even mention, as to construction of controlling works or sewage treatment facilities. Nonetheless, the Court's order appointing McClennen foreshadowed the eventual outcome by asking him to look into these three questions: (1) reasons for Illinois's failure to obtain the approval of the Secretary of War for controlling works to keep the Chicago River from again flowing into Lake Michigan at times; (2) reasons for delay in the sanitary district's construction of the Southwest Side treatment facility; (3) reasons for failure of the district and of Illinois to provide adequate funding for the designs and constructions planned early on by Illinois. All of these items were mentioned in the Holmes opinion as "contemplated" by Illinois and recommended by Hughes as special master, but inasmuch as none were included in the 1930 decree the new proceeding by the lake states was a request for more specific relief.

As to the first question, McClennen found that the reason no controlling works (basically a sluice gate at the junction of Lake Michigan and the Chicago River, to prevent polluted river water from entering the lake) was that the Sanitary District had not asked the Army Corps of Engineers for permission to build it.³⁸ While McClennen characterized the failure as "inexcusable," the district had on its side the previously expressed opinion of the Corps's chief engineer that some forms of controlling works would cause an obstruction to navigation on the Chicago waterway and hence to the Illinois and Mississippi rivers. Nonetheless, Chicago would now have to obtain approval for, and build, functionally acceptable controlling works. McClennen recommended an explicit injunction, running also against Illinois, to that effect. He thought it would be of "assistance" to Illinois to have such an injunction in place, because absent such an order

³⁷ [1F2](#).

³⁸ McClennen Report, [1F3](#) at pdf 65.

"it cannot be known what time will be required for [state] legislation" providing the funding and directive for construction.³⁹

The second question, involving delays in construction of the Southwest Side treatment plant met a similar conclusion by McClennen: a forthcoming bond issue had prevented -- politically speaking -- the Sanitary District from moving forward with land acquisition efforts, adjacent to the West Side plant, for the Southwest Side treatment facility. The fear was that the acquisition cost would doom the construction bond approval. The construction was going to cost some \$50 million for the treatment plant, plus another \$20 million for connecting sewers. The land would cost \$3 million to acquire. By the end of 1932 the district had spent only \$87,000 for the Southwest project. McClennen concluded these delays were the cause of the overall slowdown in building and opening the Southwest Side facility.⁴⁰

Turning to the most difficult of the three asserted failures of Illinois, inadequate financing, McClennen understood that the state, like the rest of the country, was in the midst of a deepening depression. The Sanitary District's taxing power was limited by the Illinois constitution to 5% of the assessed valuation of property situated in the district. Its bond-issuing authority was also constrained by a requirement for voter approval, and it was forbidden by statute to contract for anything beyond its income for the present fiscal year. McClennen saw that the district was, in the near term, hamstrung in any effort to contract for the construction of the Southwest treatment plant. Except for a budgeted item of \$57,580 for engineering and design and \$30,000 for land acquisition, there was no money left over to finance the plant. Some Cook County bonds and sanitary district bonds were already in default, and an Illinois Emergency Relief Commission had concluded that some \$80 million was needed by Cook County for unemployment relief. Federally, Reconstruction Finance Corporation bonds were to be issued to help Cook County cope with the desperate financial situation, but these had to be repaid from an

³⁹ Id. at pdf 26. The governor of Illinois, Henry Horner, had been in office only fifty days when called upon to testify before McClennen in February 1933. With the Depression deepening, he had called out the militia to prevent possible riots by unemployed persons. He was only vaguely familiar with the history of these water cases. Now the state would need to issue bonds to cover the costs of construction, because tax collections could not be fast enough to get the jobs done on time. The state constitution, however, forbade bond issuance without voter approval, and the next election would be in late 1934. McClennen opined that a Supreme Court injunction could allow bond counsel to certify that a bond issue was lawful, notwithstanding the prohibition in the state constitution. Id. at 27.

⁴⁰ Id. at pdf 33.

increase in gasoline taxes. Imposing taxes had the stated attendant difficulties, but collecting them was even harder. McClennen summed up the situation: "For five years, the constituted authorities in Cook County have encountered great difficulties in collecting taxes."

What to do? McClennen found that the Sanitary District was not at fault fiscally. Its bonds, rated triple-A early on, had gone into default because the depression made it impossible for the district to collect its authorized taxes. He concluded: "In the conditions which now exist, there is no reasonable financial measure which the Sanitary District can take, which it is failing to take."⁴¹ He recommended a clarification of the Supreme Court's decree, to make clear that what the district could not do the State of Illinois would have to do. The state had constantly taken the position in the courts that it was not liable for debts or other obligations of its sanitary districts; they had their own taxing power and should use it. McClennen thus saw that a heavier hand at the Supreme Court would actually assist the District in getting the needed facilities built and operating on time.

McClennen also pointed out that Cook County, and indirectly the District, could double the assessed valuations of property in the District. It had been the custom to assess at 37% of market value, but there was no legal barrier to changing that artificial practice, especially if enabling legislation were to be enacted by Illinois. McClennen recommended that Illinois be directed by an injunction to appropriate \$37 million, to be spent no later than October 1, 1934, for the needed constructions. Illinois contended that the Supreme Court had no power to impose such an order on a sovereign state, and that if it had the power it should not use it. McClennen's only answers to this major constitutional problem were that "the dignity and history of the State of Illinois assure its prompt compliance,"⁴² and that the Illinois General Assembly, whose members were sworn to uphold the Constitution of the United States, would not disobey a mandate of the Supreme Court. However, these were difficult times, and many lawmakers were desperate for solutions.⁴³ Would such esoteric duties actually be carried out?

The case would now move back to the justices to decide.

⁴¹ Id. at pdf 44.

⁴² Id. at pdf 57.

⁴³ Just one month before completion of McClennen's report, Governor Horner had testified to McClennen that "unless conditions rapidly and marvelously change for the better, it will be impossible for the State to find a market during each of the next four years for \$35,000,000 of bonds." Id. at pdf 60.

The opinion came down in May 1933 from Charles Evans Hughes, the former special master, now the Chief Justice. Hughes first rejected Illinois's often-voiced contention that the state was not legally responsible for either the diversion of lake water into the drainage canal or the construction of facilities to reduce that diversion, and that only the Sanitary District was legally responsible. The Court held the state was the primary offender, having set up the Sanitary District "as its instrumentality."⁴⁴ Illinois would have to repair the damage done to its sister states.

Next the Chief Justice addressed Illinois's assertion that the decree did not require it to construct anything, but merely to limit, after certain dates, its use of lake water for sewage dilution purposes to specified amounts. Illinois argued that the decree went to the limits of federal judicial authority over the state. The Hughes response to this was:

The Court did not exhaust its power by the provisions enjoining the diversion according to the times and amounts prescribed. The Court omitted further specific requirements not because of want of power but in the expectation that the diligence of defendants in carrying out the program they had submitted to the Court would give no occasion for such specifications.⁴⁵

In other words, the Court could have enjoined the wrong immediately and totally. It was only out of concern for the health of Illinois citizens that the Court had temporarily restrained its equitable hand.

Turning to the issues now at hand, the Court pointed out that the structures at issue were part of the plan continually put forward by Illinois during the hearings in the 1920s before him as special master and before the Court. That plan led to the 1930 decree and its time and water volume provisions. Hughes then recited the recent assurances by the Sanitary District and the state that controlling works might not be needed at all, and that the diversion limit of 5,000 cfs as of the end of 1935 would be met. Surprisingly, he accepted these representations and did not enlarge the decree to specify what must be built. This part of the opinion is surprising because of the seemingly slippery language of the representations (*italics added*):

⁴⁴ Supreme Court 1933 opinion, [1F4](#) at pdf 3.

⁴⁵ *Id.* at pdf 6-7.

The defendants will *undoubtedly be prepared, under existing circumstances*, to *accept* the reduction called for by the original decree to 5,000 c.f.s. at the end of 1935.⁴⁶

Uncharacteristically for Charles Evans Hughes, but perhaps required by the constitutional and economic crisis at hand, this left many things in the air. We say "undoubtedly" or "doubtless" when we really mean to signal that we are not at all sure, i.e., that we have doubts about it. Maybe Illinois would not be prepared to accept. Then there is the phrase "under existing circumstances." In another two years, when the deadline was to fall, in the midst of the depression, it would be almost certain that the circumstances would be changed. It seems Hughes was leaving room for some future argument that changed circumstances call for a different diversion limit or deadline. Hughes, having up to this point made such a powerful exposition of what Illinois had failed to do about controlling works, said only: "In view of these representations, the Court does not deem it necessary at this time to enlarge the decree by a special requirement as to controlling works."⁴⁷ Perhaps Hughes was backing off in order to avoid what might have become the largest constitutional confrontation between federal and state governments since secession.

Addressing the Sanitary District's near total failure to move forward on the important Southwest Side treatment plant due to lack of funds, Hughes recited the long history of promises in that regard, but he recognized impossibility when he saw it. This would have to be the responsibility of the state, not the Sanitary District. "To provide the needed money is the special responsibility of the State of Illinois. For the present halting of its work the Sanitary District is not responsible. It appears to be virtually at the end of its resources."⁴⁸ What then to do? Would he order the state to fund the project? What if it failed to do so? Unlike injunctions that might be enforced by sending in federal manpower, the Supreme Court could not compel money to exist in Illinois's coffers when there was none, especially when the state had made a strong case that if it issued bonds for the purpose, no one would buy them during the economic depression. Nor could the Supreme Court compel Illinois to raise state taxes or, perhaps more importantly, compel Illinois citizens to approve the levies or to pay them when they had no money. It was a time of many defaults and tax delinquencies, and the Court would not be able to change that. The Court thus declined the special master's recommendation that the Court compel fiscal appropriations by the state for building the controlling works and for acquiring

⁴⁶ Id. at pdf 8, italics added.

⁴⁷ Id. at pdf 8.

⁴⁸ Id. at pdf 9.

land, designing, and constructing the Southwest Side sewage treatment facility. Instead, the Court spoke in a tone between mild and defensive, adding to the decree only this (italics again added):

That the State of Illinois is hereby required to take all necessary steps, including whatever authorizations or requirements, or provisions for the raising, appropriation and application of moneys, may be needed in order to cause and secure the completion of adequate sewage treatment or sewage disposal plants and sewers, together with controlling works to prevent reversals of the Chicago River if such works are necessary, and all other incidental facilities, for the disposition of the sewage of the area embraced within the Sanitary District of Chicago *so as to preclude any ground of objection on the part of the State or of any of its municipalities to the reduction of the diversion of the waters of the Great Lakes-St. Lawrence system or watershed to the extent, and at the times and in the manner, provided in this decree.*⁴⁹

The Court thus refrained from ordering anything to be built at any specific time and from ordering the state to provide any set amount of funds. The only compliance standard given was a quite bizarre one, basically coming down to: Illinois, do what you need to do so that you and your cities won't have any objection to your doing what we in 1930 ordered you do about the diversion of lake water. The Court seemed to fear that Illinois would disobey the 1930 decree when the times came for cutting diversion, and that the Court was without any means of compelling compliance. It could perhaps order the jailing of the Illinois legislature for contempt, but that would require the backing of President Roosevelt and the risk of wholesale insurrection in Illinois in the midst of the Great Depression. When one compares the carefully crafted and specific recommendations of special master McClennen with the non-specific please-help-us-out-here tone of the Supreme Court's bottom-line 1933 decree, the difference is stark. Perhaps the justices regretted ever getting involved in the Great Lakes water controversies in the first place. Chief Justice Taft and Justice Holmes, major players in the early years of the controversy, were now gone from the Court, but six of the justices who agreed to the 1929 and 1930 decisions were still there. Their reticence regarding injunctive relief is hard to explain outside the context of the depression. The needed funds for wastewater treatment facilities was simply not to be had.

⁴⁹ Id. at pdf 9.

G. Interlude in the Story: Diversions reduced on time; treatment facilities up and running

We pause briefly here in the ongoing water diversion struggle, destined to resume in 1940, to observe what was happening in the later 1930s. Illinois was somehow able to comply with the diversion reductions ordered in the Supreme Court's 1930 decree. By the end of 1938 it had cut sewage-related diversion to an annual average of less than 1,500 cfs. The long-debated controlling works at the entrance to the Chicago River at Lake Michigan were completed in 1938. In most kinds of weather they prevent any part of the Chicago River from flowing the other way, "backward" into Lake Michigan. In heavy rainfall weather, the treatment plants reach their full capacity -- mostly by heavy rainwater added to the normal sewage -- and they either trigger overflow devices (usually channeling untreated sewage into a nearby body of water for a short time) or they back up into local streets. The drainage canal similarly has a finite water-holding capacity, even with the sluice gates fully open near Lockport. These situations can cause severe flooding in homes and commercial buildings, so the gates at the stem of the Chicago River are briefly opened to take the overflow into Lake Michigan. It is a problem faced by many municipalities, particularly those with so-called unitary sewage systems, where rain runoff and sewage use a common piping system and arrive at the treatment plants.⁵⁰ In 1939 the long-awaited Southwest Side sewage treatment facility, largest of all in its capacity, was opened adjacent to the site occupied by the West Side plant at Stickney.

What about shipping? It was, after all, the main driver of the lake states' complaints in the Supreme Court from the beginning. To gain some perspective on the freight volumes on the Great Lakes and in the Chicago Waterway system, the following may be of interest. Shipping on Chicago Area Waterways System (CAWS) grew from 200,000 tons in 1934 to 16 million tons in 1954.⁵¹ It peaked in 1994, at 24 million tons. In 2008 CAWS handled about 16 million tons of freight.⁵² The largest component of this traffic was coal and coke. Eleven million tons passed through Lockport in 2008, meaning the freight was either entering or exiting the drainage canal. The remainder of the tonnage represents freight coming from Lake Michigan and offloaded along the canal, or freight that moved

⁵⁰ To cite a recent example, a planned public beach on the west side of Manhattan has reportedly been postponed due to the inability of the sewage system of the City of Yonkers, a few miles upriver from Manhattan, to prevent sewage-plant overflows into the Hudson River in times of heavy rains.

⁵¹ Eisenhower veto message, cited in Maris report, [119](#) at pdf 64.

⁵² Chi. Waterways Traffic Report 2011, [1L14](#), Table 1 at pdf 9.

from a point along the canal (possibly arriving there by rail) to some other point on the canal or into Lake Michigan.

To place these figures in context, in 2007 nationally for single-mode traffic, 3.3 trillion ton-miles of freight were moved. Rail traffic accounted for 1.3 trillion ton-miles; an approximately equal amount was by truck traffic. Water traffic was considerably smaller, 157 billion ton miles, and of this the Great Lakes portion was about 50 billion ton-miles.⁵³ This is apparently less than what the Great Lakes carried in 1923. For that year, the joint Army Corps of Engineers and U.S. Shipping Board report entitled *Transportation On the Great Lakes* reported 81 billion ton-miles.⁵⁴

It would be fair to say that while Great Lakes shipping is an important component of U.S. national transportation, it represents a small fraction of the total ton-miles of freight shipped each year. Water traffic in general is only about twelve percent of rail traffic in recent years; and Great Lakes traffic accounts for less than one-third of the water traffic. Still, billions of ton-miles means many jobs in transportation, and some of the freight involved might not have moved at all without water facilities.

H. Some Emergencies Are Asserted As Needs for Temporary Increases In Diversion In 1940

Just when it would have been hoped that the 1925 litigation among the states might quiet down, and Illinois living under the final 1,500 cfs diversion limit beginning in 1939, Illinois in early 1940 petitioned the Supreme Court for a three-year increase in sewage-related diversion to 5,000 cfs, based on public health problems that were said to have occurred during the summer months of 1939 in Illinois communities downstream from the drainage canal. In other words, Illinois now needed more lake water for effective flushing. This Illinois petition was filed January 11, 1940, and was vigorously opposed by the complainant lake states, who argued that the root of any health problem lay in the

⁵³ Census Bureau 2012 report, [1L20](#), Table 1070 at pdf 675. This report itemizes Great Lakes vessels and shallow-draft vessels separately. The estimate given here for the Great Lakes portion is from the Great Lakes Shipping report of the U.S. Department of Transportation (2012). Multiple mode traffic in the United States is substantial. For example, in 2007 rail-and-water traffic nationally amounted to 47 billion ton-miles.

⁵⁴ 1926 Army and Shipping Bd. report, [1D1](#), at pdf 275.

fact that Illinois had failed to complete its sewage treatment plan and failed to provide any state funding or credit to help the Sanitary District to do so.⁵⁵

After hearing two days of arguments in March, the Court issued a per curiam decision rejecting Illinois's petition, but, just for safety's sake, appointing yet another special master to look into the downstream health issues asserted by Illinois to support its petition for greater diversion permission.⁵⁶ That special master was Monte Lemann, a highly regarded Louisiana lawyer and former president of the American Bar Association.

The first thing the new special master did was to arrange for a stipulation, the first of any importance in this long and bitter struggle among the states. It provided for amendment of the Supreme Court's 1930 decree to allow for a ten-day experiment, with a diversion of 10,000 cfs, to see what effects it might have on sludge-deposit conditions in Joliet, Illinois, a city of some 40,000 residents two miles below Lockport.⁵⁷ Joliet was the center of the health complaints. The Court entered the amending order on November 25, 1940. Diversion was increased accordingly in early December, and measurements were made. Much sludge was removed from the canal walls and deposited in a "pool" in Joliet.⁵⁸ The opposing experts drew conflicting conclusions as to what this portended for the future years here in issue, 1941 and 1942, if Illinois's petition for higher diversion were allowed.

For the main part of his work Lemann spent considerable time in the vicinity of Joliet, Illinois, whence came most of the health complaints concerning the downstream effects of the drainage canal's lower limit on fresh water diversion from Lake Michigan after 1938. Lemann took the testimony of 161 witnesses -- residents, health professionals, and scientists, as well as local government officials. In his detailed report he found no serious health problems from the lower diversion limits. The main complaint was offensive odors, especially in the warm weather months of 1939, the first year under the 1,500 cfs diversion limit. The odors made a lot of local residents feel ill, but none contracted any

⁵⁵ [1G1](#).

⁵⁶ [1G2](#).

⁵⁷ [1G3](#).

⁵⁸ A pool is created by the existence of a dam in a river. Most dams are built for the purpose of preventing rapids in rivers. Water builds up behind the dam, the buildup area being labeled a pool. Openings in the dam allow a controlled downstream flow instead of by rapids. Navigation past the dam is typically by way of a lock located alongside the dam. A lock of course slows the passage of a vessel somewhat, but it is better than for the vessel to try to negotiate rapids. The Army Corps of Engineers has built numerous dams and locks on these principles as aids to river navigation.

serious diseases. In fact, the statistics for Will County, which includes Joliet, showed a lower than statewide incidence of nearly every serious disease in 1939 and 1940.

Lemann put special emphasis on the testimony of Dr. F.W. Mohlman, Director of Laboratories for the Sanitary District. Dr. Mohlman had been doing chemical work for the District since 1919, and he had testified before special master Hughes in the 1929 hearings on re-reference. The key measurement of purification of water is the reduction in its biological oxygen demand, or BOD, which at that time was measured in pounds of oxygen for a given effluent period. Highly efficient purification systems, like activated sludge plants, could reduce BOD of the effluent by 90% or more, so the effluent waterways would contain much more oxygen than if untreated. The higher oxygen concentration would mean not only better plant and fish life, but also further reductions of impurities through oxygenation along the flow path of the waterway, in this instance the Des Plaines River. Less efficient purification systems, like Imhoff tanks, were achieving only about 35% BOD reduction. A high BOD figure (low reduction of demand) leads to a high level of offensive odors as the organic materials in the water continue to consume oxygen while they degrade (putrescence).

Dr. Mohlman admitted that conditions of BOD reduction were very poor at Lockport and in areas immediately downstream thereof, such as Joliet, and were not likely to get any better in 1941 and 1942. He conceded he was unsure whether a greater amount of flush water would improve conditions in Joliet. It might just move suspended materials farther down from upper parts of the canal, and these might then be lodged in the pool at Joliet, as the ten-day experiment seemed to show. Illinois had modified its petition during the Lemann hearings, and now said that instead of a 5,000 cfs average increase in diversion over the 1,500 cfs limit of the decree, it planned to draw only an additional 1,150 cfs plus domestic pumpage in the winter months, up to 6,000 additional cfs in July, and 5,000 additional cfs in June and August, plus pumpage, thus reducing the requested increases to an average of 2,200 for the two years in question. (The first of the three years originally the subject of the petition, 1940, had already passed; the Lemann report is dated March 31, 1941.)

Lemann lauded the Sanitary District for its efforts to build the best kind of treatment facilities at the lowest possible cost to its taxpayers, but he criticized the slow pace and the harm this was continuing to cause to the lake states ten years after the Supreme Court's decision that Illinois was in the wrong. He recommended dismissal of Illinois's enlargement petition. He thought health risks were minimal and that other measures at the

treatment plants could ameliorate the relatively high biological oxygen demand problems on the canal. Naturally, Illinois lodged objections to the report. The lake states, even though they prevailed on the main issue, objected to a number of the master's findings.⁵⁹ They complained that Illinois had repeatedly sought to nullify the Court's 1930 decree, but did not ask for any additional relief other than their costs for the Supreme Court proceeding.

Two months later, in a four-line per curiam order, the Court overruled all objections and confirmed Lemann's report.⁶⁰ The Illinois petition was dismissed "with costs."⁶¹ Justice Black dissented, but without opinion.

I. Some Short Emergency Relief In 1956 and 1957

The Mississippi River was running low in 1956. It caused such an emergency for navigation that the Supreme Court was asked to lift the 1,500 cfs diversion limit for Illinois, to allow a diversion of 8,500 plus domestic pumpage, for a few weeks, in order to raise the water level in the Mississippi. On December 17, 1956, the Court authorized a temporary increase in diversion for Illinois to 8,500 cfs plus domestic pumpage, but only until January 31, 1957, about six weeks. The increase was effective only if the Army Corps of Engineers determined it to be "useful in alleviating the emergency with respect to navigation currently existing," and only in such amounts of increase, and at such times, as the Corps might direct.

This order was per curiam,⁶² and it was strongly opposed by the lake states, particularly Wisconsin. A follow-on order was issued on January 28, 1957,⁶³ extending the increase permission until February 28, making a total of ten weeks. No information has been found regarding whether or not there was a noticeable effect on navigation on the Mississippi.

⁵⁹ See [1G8](#) and [1G4 1G5 1G6](#).

⁶⁰ [1G9](#).

⁶¹ Id.

⁶² [1H1](#).

⁶³ [1H2](#).

J. 1959: Challenge To Chicago's Domestic Pumpage; Circuit Judge Maris Appointed Special Master

In June of 1959 hostilities had again broken out over the Lake Michigan diversion by Illinois,⁶⁴ the Court now appointed Senior Circuit Judge Albert B. Maris of the Third Circuit to take charge as special master. This time the lake states' complaint concerned not Chicago's sewage-related diversions, but its domestic pumpage, i.e., the water drawn out of Lake Michigan for human and industrial use. As mentioned earlier, this was running about 1,700 cfs, or a little more than the 1,500 cfs allowed for navigational purposes. It will be recalled that domestic pumpage was unrestricted in all the prior Supreme Court orders on lake water diversion. The lake states did not challenge the right of Chicago to draw this much pumpage. Indeed, the lake states were doing the same thing themselves, drawing large quantities of lake water for domestic and industrial uses. Rather, the complaint was that Chicago was *failing to return* that water to the lake in the form of purified sewage effluent as the other lake cities were doing, and was, as we have seen, sending its effluent westward via the drainage canal, to the Des Plaines, Illinois, and Mississippi Rivers. As always, the lake states complained of lowering of their harbors by this system, and also of the lessening of the amount of electric power that the lake states and Canada could generate in hydroelectric power plants along the connecting waters of the Great Lakes due to their lower levels. More water for Chicago meant less water for the complainant states' electric generators. They wanted the 1930 decree amended to specify that all of Illinois's sewage effluent must be returned to Lake Michigan. The United States was permitted to intervene in the case in early 1960, citing a need to balance navigational needs, power needs, federal property, and friendly relations with Canada.

As a senior (partially retired) circuit judge, Judge Maris did not have to spend full time on appeals at the Third Circuit in Philadelphia, and that was perhaps a small factor in his appointment. However, the dominant drivers were undoubtedly his superb legal mind and his ability to master complex technological and economic facts. Judge Maris spent over seven years on this assignment, hearing testimony from over 150 witnesses in seven cities during the period October 1959 to July 1963, and receiving some 1,300 exhibits. The testimony was taken over 158 hearing days and produced a transcript running to 30,681 pages. He inspected sewage treatment plants, controlling works, electric power plants, and many other facilities after the testimony had been taken. From this mountain of evidence, and a great deal of legal research, Maris produced what was by far the most

⁶⁴ [111](#). The brief of the lake states is at [112](#).

comprehensive special master's report on all the aspects of the Great Lakes and the Chicago issues, including hydrologic details, shipping data, health information, and electric power generation.⁶⁵ For our purposes his main conclusions can be boiled down to five:

1. Congress has the power, under the commerce clause, to regulate interstate waterways. This power includes the authority to move water from one navigable body of water to another.⁶⁶
2. By the Rivers and Harbors Act of 1930 Congress approved the Illinois diversion at the final level specified in the Supreme Court's decree of that year, i.e., 1,500 cfs plus domestic pumpage. Pumpage at the time was about 1,700 cfs, and had not changed much as of the time of the Maris report in 1964. Congress had done nothing in the intervening years to alter its permission as given in the 1930 act. Therefore, Congress had lawfully permitted Illinois to withdraw a total of 3,200 cfs up to the time of this 1966 report.
3. Congress has not authorized unlimited domestic pumpage. Increased pumpage would exacerbate, in a manner not authorized by Congress, the wrongs being done to the Lake States as identified in the Court's 1928 and 1930 decisions.
4. Illinois's authorized extraction of 3,200 cfs of water from Lake Michigan is for the totality of its needs, including navigation, pollution control, drinking water, and industrial uses. The diversion figure should be calculated, as it has been in the past, in a manner that counts as diversion the rainwater runoff in Illinois that would have gone into the lake but has instead been diverted into the Chicago Area Waterway System (CAWS).

The legal reasoning underlying these conclusions is well worth reading but is too complex for full inclusion here. The most important of the conclusions is #2, that Congress had authorized Illinois to draw 3,200 cfs from the lake. Everything else stems from this. Judge Maris arrived at this position by noting the language of the 1930 Rivers and Harbors Act. It will be recalled that the original Supreme Court decree against

⁶⁵ See the Maris special master's report at [119](#).

⁶⁶ See, e.g., *Wisconsin v. Duluth*, 97 U.S. 379, 386-87 (1878) (upholding congressional enactment appropriating funds to cut a canal across Minnesota land projecting into Lake Superior, even though this would draw water away from a river port in Wisconsin.)

Illinois, written by Chief Justice Taft, came down in January 1929. It found that the Secretary of War lacked power to issue a permit for Illinois to increase its diversion from 4,167 cfs to 8,500 cfs. Later that year, special master Charles Evans Hughes found that 1,500 cfs plus domestic pumpage was the limit of what could be authorized, and this was enshrined in Justice Holmes's 1930 decision and decree. Later that year, Congress recognized the decree, and passed the Rivers and Harbors Act,⁶⁷ part of the first section of which stated:

[T]he water authorized at Lockport, Illinois, by the decree of the Supreme Court of the United States, rendered April 21, 1930, and reported in volume 281, United States Reports, in Cases Numbered 7, 11, and 12, Original . . . *is hereby authorized to be used for the navigation of said waterway.*⁶⁸

Since the Court's decree permitted two kinds of withdrawals, 1,500 cfs directly and an unspecified amount for domestic pumpage, the effluent of which, after treatment, would be placed in the drainage canal and hence be useful for navigation, and since domestic pumpage amounted to about 1,700 cfs at the time (largely unchanged as of 1964), Judge Maris found that this statutory language amounted to a congressional authorization for Illinois to withdraw 3,200 cfs in toto for what could be considered navigational purposes. Nearly all of the remainder of his 441-page special master's report was devoted to the question of whether Illinois could draw even more than 3,200 cfs by relying on the absence from the decree of any specific limit for domestic pumpage, or whether permitting such an increase would again intrude on the rights of the lake states and Canada, injuring their ability to operate harbors and to generate electricity. He found that the 3,200 cfs limit must be maintained.⁶⁹

Whatever the possible weakness of Judge Maris's conclusion on congressional authorization, he must have possessed superb diplomatic and mediation skills, for he accomplished what had never been done before or since in this long-running controversy about the Chicago drainage canal: All the states agreed with his proposed form of decree, and the Supreme Court entered it accordingly on June 12, 1967.⁷⁰ Illinois would be

⁶⁷ [1F1](#).

⁶⁸ *Id.* at pdf 12.

⁶⁹ [1I9](#) at pdf 224.

⁷⁰ The Court may have been troubled by Judge Maris's reasoning about the extent of congressional approval embedded in the 1930 act. The decree, [1111](#), contained this wording: "the parties having agreed to the form of the decree, the Findings of Fact in the Report are hereby

allowed 3,200 cfs of lake water, but it could not increase the amount on the ground of growing population or increased industry, without further approval from Congress.

K. Another Stipulation (1980)

The states' concurrence in 1967 with Judge Maris's recommendations appeared to keep at least an uneasy peace for a number of succeeding years regarding Illinois's withdrawals of water from Lake Michigan. These withdrawals were called "permanent," in the sense that none of the water taken would ever return to the lake. Most of it, troublesome to the other lake states, would, except for some relatively small losses due to evaporation and ground absorption, end up as wastewater, pass through treatment plants, and emerge into the drainage canal on a westward journey to the Mississippi. All the other lake cities sent their treatment effluents back into Lake Michigan, thereby assisting in maintaining the heights of lake harbors and the usefulness of downstream hydroelectric generating plants all the way to the St. Lawrence. This difference in destinations of effluents was a major underlying source of discord driving the controversies from the time of Oliver Wendell Holmes's 1930 decision. Holmes had expressed surprise that the lake states actually wanted Illinois to send its effluents back into the lake at a time when sewage treatment was only in its infancy in Chicago and most other cities, but that was indeed their position. The Court rejected it then, as did Judge Maris in the 1960s.

In 1979 the Court was obliged to call again upon Judge Maris to solve new Lake Michigan diversion problems. Available records do not indicate the exact nature of the dispute that had broken out in the still-open Supreme Court cases from the 1920s, but it apparently dealt with a need of Illinois to vary its lake withdrawals above the 3,200 cfs in the decree in times of "extreme hydrologic conditions," presumably unusually dry weather.

A report from Judge Maris was filed in the fall of 1980.⁷¹ Based on it, two months later the states again reached agreement. In times of extreme need caused by the weather, Illinois could draw based on a sort of water-banking scheme. Instead of being limited every year to an average withdrawal of 3,200 cfs, Illinois could choose to increase its

adopted, and it being unnecessary at this time to consider the Special Master's legal conclusions, IT IS ORDERED, ADJUDGED, AND DECREED that"

⁷¹ [1112.1](#).

water intake up to 3,680 cfs.⁷² However, it could not do this every year. It was constrained by a 40-year window -- due to expire in 2020 -- in which it could utilize annual overruns aggregating, for the entire period, no more than 2000 cfs. Thus, if Illinois wanted to spread the allowed overage evenly over the 40 years, it could draw only an extra 50 cfs during each of the 40 years; $40 \times 50 = 2,000$. Alternatively, it could draw up to 3,680 cfs in a single year, but would have to cut well back from that in later years to avoid using up its "bank account" of cumulative overruns of 2,000 cfs. Also, the cumulative calculation was stated in the amended decree to be "algebraic," i.e., if Illinois were to draw below 3,200 cfs average for a particular year, that shortfall would be added back into its "bank" for possible later use.

The 1980 agreed modification also specified, indirectly, how much of the withdrawn water could be used for wastewater removal purposes in the drainage canal. The extra allowances mentioned above would not be effective until the Illinois legislature passed a law limiting the drainage canal's direct usage of lake water to 320 cfs. This was undoubtedly motivated by a desire on the part of the lake states to undo what they saw as the harm imposed upon them by the 1889 Illinois statute authorizing the building of the canal. It will be recalled that that statute specified a flushing volume proportional to population, one that in 1980 would equate to more than 10,000 cfs. That statute had in effect been nullified by all the Supreme Court rulings in the meantime, but it was still on the Illinois statute books. The Illinois legislature complied right away with the 1980 agreed provision and enacted a 320 cfs limit on diversions for purposes of cleansing the canal's water.⁷³ It began to look like a kind of peace treaty among the states regarding Illinois and the Chicago drainage canal.

L. No Respite: Milwaukee's Effluent Polluting the Lake?

While the states were hammering out the details of a 1980 agreed diversion program that would serve them well into the twenty-first century as described in the previous section, it should not be supposed that other conflicts about the lake were not going on among the states. Illinois chose to strike back at one of its adversaries, Wisconsin, in 1972. As mentioned above, the other lake cities had been putting their sewage effluent back, after suitable treatment, into the lake, and had been pressing Chicago to do so since at least the

⁷² The decree also contained a provision for a kind of super-overwithdrawal up to 3,840 cfs, but this was allowed to be used in only two of the succeeding 40 years. See the decree at [1113](#).

⁷³ Ill. P.A. 80-1411 (1980), [1114](#).

time of Oliver Wendell Holmes's 1930 opinion. As we have seen, the Supreme Court and several special masters over the next fifty years had worked out solutions and compromises on that question that would keep the canal open and Chicago's wastewater effluent flowing westward, away from the lake. Now Illinois complained that Milwaukee, by putting its effluent into the lake, was endangering the health of Illinois citizens -- particularly bathers at Illinois lakefront beaches -- and should be enjoined.

Illinois's first salvo was an original action in the Supreme Court in 1972, naming Wisconsin as co-defendant with the City of Milwaukee. Invoking the original jurisdiction of the Supreme Court is not a straightforward matter. If the dispute is truly between states, the jurisdiction of the Supreme Court is exclusive.⁷⁴ But if it is between a state and citizens (including cities) of another state, the Supreme Court's jurisdiction is not exclusive, and can be shared with the lower courts.⁷⁵ In order to sort out which kind of case is which, and to send the latter usually to the lower courts first, the Supreme Court requires a petition to obtain its permission to lodge an original action there. Many cases sought to be lodged in the high court are somewhat unclear or disguised as to who the real parties are. If the complaint involves a state creature, like a city or a specially created district, the petitioner-state will typically argue that the defendant state is the main wrongdoer, acting through its creature as agent of that state. The Court sorts through the allegations, makes the determination about what kind of case it really is, and grants or denies the petition accordingly. If denied, the case will have to be filed in a district court and work its way through the federal judiciary in the normal way.

Illinois was not able to make it through the petition hurdle. The complaint was that Milwaukee was discharging some 200 million gallons per day of raw or only partially treated sewage into Lake Michigan, creating a public nuisance in the form of dangers to health of Illinois citizens and others using lakefront beaches and fishing areas. If the case were truly state-versus-state, the Supreme Court would have exclusive original jurisdiction. In other state-brought cases, the Court's original jurisdiction is concurrent with that of the lower courts; the Supreme Court can either take a case or require the plaintiff state to go first to the lower federal courts. Here the Supreme Court found that the dispute was not essentially with the State of Wisconsin, but rather with the City of Milwaukee. The Court, after noting that its exercise of concurrent original jurisdiction had always been used sparingly, found that while Wisconsin could be made a party to the case, it was not essential that such a joinder be done. The case could be maintained

⁷⁴ 28 U.S.C. § 1251(a).

⁷⁵ 28 U.S.C. § 1251(b).

against Milwaukee, so the matter should be relegated to the lower courts.⁷⁶ The Court said federal common law of nuisance would apply when the case was filed in the lower courts.

It would take nine years, until 1981, for the case to work its way back to the high court, and three additional years for its resolution on remand. After failing to get the Supreme Court to take the initial case, Illinois went to a district court. It chose to sue Milwaukee on Illinois's home ground, i.e., in the Northern District of Illinois. At first the case was assigned to Judge William Bauer, who overruled Milwaukee's objections to service of process, finding that there was an allegation that the city had caused the tort of public nuisance in the Northern District of Illinois, so the long-arm statute would reach it. Judge Bauer was elevated to the Seventh Circuit in 1974, and Illinois's district court case was transferred to the district's newest judge, John F. Grady, who presided through judgment in the summer of 1977.

Judge Grady ruled that, as stated by the Supreme Court, for this sort of pollution nuisance federal common law should apply. However, he noted that two state claims -- one for nuisance and another for a statutory environmental violation -- involved the same elements, so it did not matter which underlying law was applied. After a four-month trial on all three counts, he found Milwaukee was polluting the Illinois shores of Lake Michigan by dumping into it pathogens lurking in the city's incompletely treated sewage effluents. The judge described briefly the activated sludge process of wastewater treatment, as applied by Milwaukee and nearly all other large cities, and which is the subject of the second of the present libraries. The process involves utilizing bacteria -- the "aerobic" kind that flourish in air or any oxygen-rich environment -- present in large amounts in normal sewage, as helpers in the digestion of other organic materials in the sewage. The process then settles out these helpful creatures in settling tanks and recycles them back to the beginning, so that they can again do their valuable work on incoming sewage. Eventually, these bacterial helpers become so numerous that not all of them can be cycled back for further duty. The excess creatures are taken from the settling tanks, dried, broken into granules, and sold as fertilizer. The bacterial digestion of sewage contents is about 92% effective. The remaining 8% of organic materials could possibly include some pathogens, and these might make it through into the effluent of the treatment plant.

⁷⁶ [1J1](#).

Retention time, the number of minutes allowed for treatment of a given bit of sewage, is a critical parameter in urban efforts to treat sewage and produce a clean effluent. A plant is designed for incoming liquids to move through treatment at a pre-designed rate. This is fine so long as the incoming volume does not get too high. If it does, the plant operator's choices are both unsatisfactory: (i) increase the speed (shorten the retention time) of passing through the plant, but with the result of a less clean effluent; or (ii) keep the retention time the same as before, a fully adequate time, but now with dangerous backups at the entrance to the treatment plant, possibly causing flooding of sewage into neighborhood streets and homes. To deal with such dilemmas cities generally build multiple aerating chambers and settling tanks into their plants, leaving most of them unused in normal weather conditions. In times of wet weather the standby units can be quickly brought into action to deal with the heavy inflow to the plant.

Judge Grady found that the Milwaukee treatment plants were simply inadequate in size for the city's population, then about one million persons. The problem -- then and now-- was much worse in wet weather, due to the city's use of "combined" sewers, where rainwater runoff and sewage are fed into the same pipes and arrive at the treatment facilities together, often overwhelming the capacity of the plants and backing up the pipes to some sort of overflow location, usually Lake Michigan. Milwaukee was constructing new sewers and treatment plants, but the court found the pace of construction inadequate to the needs. The city's planned chlorination of plant effluents was also found to be inadequate, even before it was in place.

Turning to the question of whether any of this adversely affected Illinois citizens, Judge Grady found that some surviving pathogens and viruses were able, via currents in the lake at some times of year, to traverse the 39 miles to the Illinois border and potentially infect Illinois residents. Moreover, plants, especially algae, were becoming more abundant due to the increased nutrients furnished by sewage in the lake, and this in turn harmed fish populations by commandeering the water's oxygen supply during the algal decomposition process. He found these factors to constitute a public nuisance and issued an injunction to prevent it. The injunction commanded Milwaukee to refrain, among other things, from putting into the lake any effluent containing more than 5 milligrams of suspended solids per liter of effluent liquid. Milwaukee appealed to the Seventh Circuit.

In the court of appeals the issues became complicated due to the passage by Congress of the Federal Water Pollution Control Act as amended in 1972, and the issuance of a permit to Milwaukee by a state agency approved by the EPA. The 1972 amendments established

a regulatory regime for wastewater treatment plants. They now had to use the best available technology and meet established standards of effluent purity. Discharge permits would need to be obtained from the EPA or an EPA-approved state agency which would apply the federal standards.⁷⁷ The question in the Milwaukee case was whether compliance with these statutory requirements and norms eliminated any claim of nuisance under state or federal law. In other words, had the 1972 amendments to the FWPCA eliminated the federal common law of nuisance or preempted state remedies? The court held it had not.⁷⁸ Congress had specifically mentioned in the enactment that nothing contained in it would prevent the right of any person under state or common law to enforce effluent standards "or to seek any other relief."⁷⁹

The question then became what nuisance-abatement remedies were still available against an entity that has complied with the federal laws. The Seventh Circuit agreed with most of what Judge Grady had done; private actions were not precluded. Its only real disagreement concerned the details of the injunction he issued.⁸⁰ The court of appeals thought the evidence was too vague to support a conclusion, recited in the injunction, that Milwaukee must reduce the amounts of solids in its sewage plant effluents to a figure no more than 5 milligrams per liter. The standard normally applied by permitting authorities at the time was 30 milligrams per liter. The appellate panel said the more stringent requirement was without evidentiary support, being based only on the conclusions of expert witnesses, with no grounds given.⁸¹ In all other respects the court affirmed Judge Grady's decision.

In a case of this political sensitivity, with two states lining up basically against another state (Wisconsin), and with a federal judge in Chicago telling sanitary authorities in Milwaukee what they must do about clean water, the Supreme Court was likely to grant certiorari to review the decision. That is of course what happened, and the views of the high court were announced in May 1981.⁸² Six of the nine justices, over a rather strenuous dissent by Justice Blackmun, found that Congress, by its exceptionally detailed 1972 modifications to the Water Pollution Control Act, intended to foreclose, at least for

⁷⁷ The EPA can issue discharge permits itself, but apparently it seldom does so. The more common scenario is for the EPA to approve certain state agencies as competent to issue discharge permits complying with the federal environmental laws.

⁷⁸ [1J2](#).

⁷⁹ [1J7](#) at pdf 74, Section 505(b) of the enactment.

⁸⁰ [1J3](#).

⁸¹ Id. at pdf 28-29.

⁸² [1J4](#).

public waterway issues, any remedy of the federal common law nuisance type, the very thing the Court had said was still open in its 1972 decision relegating this case to the lower courts. But, said the Court now, Congress, five months *after* that 1972 decision, had radically altered the legal landscape. There was no room now for the vagaries of the federal common law of nuisance, which the Court characterized as basically judge-made law, something that should seldom be thought appropriate for important national issues. The state-law claims that were all along pleaded and tried in this case were a different animal. The Court ruled that Congress did not intend to preempt those. Hence the case would be remanded, to be reconsidered by the Seventh Circuit for the claims based on Illinois state law.

There may have been some state loyalties at play in the various decisions. Judge Grady was born in Chicago and practiced there before going on the bench. Judge Phillip Tone, who wrote the Seventh Circuit opinion, was also a native of Chicago. Justice Rehnquist, who reversed on behalf of the Supreme Court majority, was born in Milwaukee. Justice Blackmun, author of the three-justice dissent, was born in Illinois, although his law practice had been in Minnesota. When the case arrived back at the Seventh Circuit on remand from the Supreme Court, the judges were unsure of their jurisdiction. The district judge had lumped the federal common law claim and the state law claims together in making his decision. Now that the federal component had been struck down by the Supreme Court, what was the status of the original judgment? The appellate judges found solace in the fact that they had before them a pair of companion cases, against the city of Hammond, Indiana, where similar state-law claims were squarely in issue. One had been brought by a Chicago citizen, Scott, and the other by the State of Illinois and the Chicago Sanitary District. Claims in these cases included trespass, violation of the Illinois Control Board's water quality standards, and other state-law claims. The district court in Chicago did not actually decide the merits of these cases, but had refused to dismiss the claims. Hammond was allowed an early appeal, and the Seventh Circuit took that case along with the remanded Illinois case and heard them together.

This time the Seventh Circuit panel was headed by Senior Circuit Judge Thomas Fairchild, a Milwaukee native who had served on the Supreme Court of Wisconsin before his appointment to the federal court by President Johnson. On the panel with him was Circuit Judge Sprecher. Born in Chicago, Judge Sprecher voted to affirm the district court rulings, i.e., against Milwaukee and Hammond, but he died before the opinion was handed down. The third member of the panel was Judge Richard Cudahy, presently still a senior judge on the court. He is originally from Milwaukee but has lived and worked in

many places, including for a while Chicago. Judges Fairchild and Cudahy ruled for Milwaukee, overturning the two district court rulings (the one against Milwaukee and the one against Hammond).

The two members of the appellate panel first had to deal with preemption, i.e., whether the extensive water-quality legislation enacted by Congress had now overridden any *state* laws that might be in conflict with that legislation, under the supremacy clause of the Constitution. This in turn would depend on whether Congress intended such a preemptive result. Illinois took the position that the Supreme Court ruling in this case, back in 1972, upheld federal common law for these situations and displaced state law; and since the second Supreme Court ruling, in 1981, had found federal common law was displaced by intervening congressional action, the result should be that state law was reinstated. In addition to this complex mind-twisting argument, Illinois had a second one: There was in the 1972 Clean Water Act amendments no clear and unambiguous expression of congressional intent to preempt state laws in the area of clean water. The two appellate judges could not accept either argument.⁸³ They expressed concern that this was really an attempt by one state to regulate the wastewater effluents of another state -- something particularly suited to Congress and unsuited for states to undertake. Interstate bodies of water like Lake Michigan are subject to possibly competing uses, one such use being as a repository for wastewater treatment plant effluents. Another use is for drinking water. Etc. Equitable apportionment was the only way, said the judges, to accommodate and reconcile these needs. Since such apportionment was within the unique control of Congress, state laws in the area must be preempted.⁸⁴

A year later, in 1985, the Supreme Court denied certiorari, refusing to review the Seventh Circuit decision, with Justices White and Blackmun dissenting and Justice Powell recusing himself from the case.⁸⁵ Thus ended this thirteen-year phase in the struggle over who could do what to the waters of Lake Michigan. With so many divergent interests still in play, the larger controversies about the lake water were destined to continue.

M. A New Spirit Over the Waters?

⁸³ [1J5](#).

⁸⁴ *Id.* at pdf 17.

⁸⁵ [1J6](#).

The Great Lakes were no stranger to agreements among the various sovereignties that shared their waters -- the United States and Canada, and the eight states bordering the lakes. The first of these was the 1909 Boundary Waters treaty between the United States and Canada.⁸⁶ Its main objectives were not to limit diversions but (i) to assure adequate navigational rights for both countries and (ii) to provide for equitable electric power generation by each country. Article IV of the treaty specified that any *increased* diversions by one country that would affect the other would need to be approved by a joint commission set up by the treaty, consisting of three appointees of each country. Existing diversions were not affected. (Recall that at this time Chicago was apparently withdrawing 4,000 - 10,000 cfs plus domestic pumpage.) Moreover, new diversions for sewage disposal purposes were exempted from the treaty; its provisions were expressly not intended to interfere "with the ordinary use of such waters for domestic and sanitary purposes."⁸⁷ In setting up the joint commission, the treaty set out a precedence for water uses that the commission might approve, with "uses for domestic and sanitary purposes" first on the list, followed by uses for navigation and uses for power and irrigation. In short, the 1909 treaty had almost no effect on the controversies over water for Chicago's drainage canal.

Beginning in 1965 and continuing through 2007, Congress passed a number of enactments affecting water diversions. In 1965 a new high-level Water Resources Council was created, consisting of seven cabinet secretaries and the administrator of the EPA, with the chairperson to be appointed by the President.⁸⁸ Notably for our purposes, Congress did not see fit in any of these statutes to intrude on the Supreme Court's now 40-year-long quasi-administration of the Illinois diversion issue. Indeed, in 1986 an act was passed specifying that no state or entity shall divert any Great Lakes water without the consent of all eight lake state governors, but also stating that this provision would not apply to any diversion that was already authorized as of the date of enactment (November 17, 1986). In other words, the original Supreme Court decree, as amended through 1986, would remain the law.

By 2005 the lake states and provinces saw that it might be in their mutual interests to cooperate. After so many years of controversy, it must have been refreshing to many of

⁸⁶ [1K0](#).

⁸⁷ Article III. Additionally, Article V, dealing with the Niagara River, specified that the prohibitions of that article "shall not apply to the diversion of water for sanitary or domestic purposes." *Id.* at pdf 3.

⁸⁸ 42 U.S.C. § 1962a.

the participants when the lake states, joined by Canada, actually reached an interstate compact on how to accommodate their competing interests without waiting for Congress to act further. This compact was negotiated in the years preceding 2005 and was signed in that year by the governors of all eight lake states.⁸⁹ It was, per the Constitution, subject to approval by Congress, which was obtained in 2008. It established a Great Lakes St. Lawrence River Basin Water Resources Council, composed of the governors of the eight states. It expressly contemplated cooperation with the provincial prime ministers of Ontario and Quebec, arranged in a separate agreement at the same time. The combined council and the two prime ministers were to form the Regional Body. The main purposes of these agreements were to provide consistent conservation measures for the Great Lakes waters.

Of interest for our story on water diversions, the 2005 compact and agreement forbade any *new* diversions except under narrow circumstances as approved by the Regional Body, but explicitly exempted diversions that were authorized, and might in the future be authorized, for Illinois under the Supreme Court decree of 1930 as amended.⁹⁰ (It will be recalled that the 1930 decree was left open for Illinois to apply, if good cause be shown, for increased diversions. As we have also seen, these increases and modifications sometimes did occur over the ensuing decades.) The treaty drafters apparently saw the large political hurdles involved in getting congressional approval for a compact that would restrict the existing Chicago-area diversion.

The states and the affected Canadian provinces have been at work trying to preserve the waters of the Great Lakes as best they can, given the many competing needs involved. The spirit is there, but the status quo for the drainage canal remains in place.

N. A Fish Intrudes: The Asian Carp Controversy

Tracking all the foregoing history, one would perhaps think the interstate compact had signaled an end to the lake states' efforts to close the canal. Not so. Just a year after the 2008 congressional approval of the Great Lakes interstate compact,⁹¹ trouble broke out again, focused once again on the desire of some of the lake states to shut down Chicago's drainage canal entirely. We have seen this theme through many of the prior struggles in

⁸⁹ [1K2](#).

⁹⁰ Id. at pdf 20.

⁹¹ [1K4](#).

this story. This time, in December 2009, the State of Michigan went back to the Supreme Court with an emergency request to reopen the 1930 decree and to close the canal completely, not due to lowering of lake levels but to a fear that Asian carp were about to invade Lake Michigan and establish permanent habitats there, with attendant havoc to the existing fish populations and other marine life.⁹² Within days the States of Ohio,⁹³ Minnesota,⁹⁴ Wisconsin,⁹⁵ New York,⁹⁶ Pennsylvania,⁹⁷ and Indiana⁹⁸ filed briefs supporting Michigan's effort, as did the province of Ontario.⁹⁹ The United States, which had intervened in these cases in 1960, sided with Illinois in resisting the reopening of the case and the closure of the canal.¹⁰⁰

A few months after these filings, the Court issued an order refusing to reopen of the decree, refusing a supplemental decree shutting down the Chicago drainage canal, and refusing permission for Michigan to file a new original action in the Supreme Court on the subject.¹⁰¹ Michigan, Wisconsin, Ohio, and Pennsylvania responded by commencing a lawsuit in July 2010 in the federal district court in Chicago, naming as defendants the U.S. Army Corps of Engineers and the Metropolitan Water Conservation District of Greater Chicago (formerly the Sanitary District).¹⁰² The complaint was essentially that the defendants were operating water facilities in a manner causing infestation of the Great Lakes with Asian carp, a public nuisance that was harming the citizens of the plaintiff states. They asked the court to require the defendants to take immediate steps to "physically separate the Asian carp-infested Illinois waters from Lake Michigan."¹⁰³ The complaint asked the court to order the Corps of Engineers to close the locks it operates at both ends of the drainage canal, and to order the District to keep closed the sluice gates it operates at the western (Lockport) end and the eastern (Lake Michigan) end. Prior to the time fixed for the Corps and District to answer the complaint, the plaintiff states moved for a preliminary injunction to accomplish these goals, except that the lock and sluice

⁹² [1M1.](#)

⁹³ [1M1.2.](#)

⁹⁴ [1M1.3.](#)

⁹⁵ [1M1.4.](#)

⁹⁶ [1M1.5.](#)

⁹⁷ [1M1.11.](#)

⁹⁸ [1M1.12.](#)

⁹⁹ [1M1.6.](#)

¹⁰⁰ [1M1.7.](#)

¹⁰¹ [1M2.](#)

¹⁰² [1M3.](#)

¹⁰³ *Id.* at pdf 33, para. 2.

gate closure demands contained an exception: "except as needed to protect public health and safety."

The defendants' opposition to the motion for preliminary injunction took two directions. First, they denied any immediate threat to Lake Michigan from Asian carp. Second, they stressed the need to continue operating sluice gates and locks, not so much for their original purposes of wastewater treatment and navigation, but because of their evolved main contemporary function: flood control.

Five months after the suit was commenced, and after lengthy hearings, the district judge on December 2, 2010, denied the motion for a preliminary injunction.¹⁰⁴ The plaintiff states had in the interim cut down considerably on their near-term injunctive demands. They no longer sought immediate closure of all the locks and gates. Their position had moderated mainly to asking for an order directing the installation of screens in the sluice gates at the lake end, permitting water but not fish to pass through; installing block nets in the Little Calumet River; and temporarily closing the sluice gates at the Lake Michigan end, again with the proviso "except as needed to protect public health and safety."

Two necessary requirements for a preliminary injunction are (i) likelihood of the plaintiff's success at trial and (ii) a legal injury to the defendants that cannot be adequately compensated by a money damages award. Here the district judge, Robert M. Dow, ruled that the plaintiff states had not established either prong. On the first, the judge found that the efforts of Congress and the Corps to prevent migration of carp into Lake Michigan -- mainly by the federal construction of an electric-field barrier across the canal -- made the permanent establishment of carp in the lake unlikely. On the second prong, irreparable harm, the judge found that the discovery of a few eDNA (environmental DNA) carp fragments and one dead carp in the lake did not portend a long-term occupation of the lake by large colonies of carp. The preliminary injunction was thus refused.

The plaintiff lake states appealed to the Seventh Circuit. Eight months later, in August 2011, that court affirmed the refusal, but on a different analysis.¹⁰⁵ The appellate court thought the risk of a public nuisance from carp establishing themselves in the lake, and attendant irreparable harm, were substantial. However, the efforts of many agencies to combat the threat in various ways "diminishes any role that equitable relief [i.e., an

¹⁰⁴ [1M4](#).

¹⁰⁵ [1M5](#).

injunction] would otherwise play."¹⁰⁶ It concluded that in light of the many ongoing efforts, "an interim injunction would only get in the way." The court cautioned, however, that if the agencies carrying on the struggle against carp infestation were to "slip into somnolence," or if new technical information were to be brought forth later in the case, this conclusion could be revisited.

The Supreme Court denied certiorari to review the Seventh Circuit decision. With the preliminary injunction thus refused, jurisdiction in the case then returned to the district court, where it must have been expected to progress in a more or less normal way. That is not quite what happened.

The Corps of Engineers and the Sanitary District, buoyed by their success in blocking a preliminary injunction, now moved to dismiss the entire case on the ground that the complaint failed to state any cause of action upon which relief could be granted. This is a difficult motion to win, because the district court must assume everything stated in the plaintiff states' complaint is true. This motion was made to Judge Dow, and was fully briefed by both sides while Judge Dow still had the case. However, prior to ruling on it, in May 2012 a new judge, John J. Tharp, was appointed to the Northern District of Illinois federal court. As is customary in this circumstance, the existing judges are called upon by the clerk of the court to identify a number of civil and criminal cases on their dockets to be assigned to the new judge in order to provide a work docket for him. Among the cases selected by Judge Dow for transfer to Judge Tharp was the one we have been discussing.

Judge Tharp lost no time in tackling the complex issues raised by the defendants' motion to dismiss. In a lengthy opinion issued in December 2012, he granted the motion.¹⁰⁷ He said of the plaintiff states' position: "The 'central and ultimate relief sought' by their complaint is a permanent injunction requiring hydrologic separation of these bodies of water," i.e., the Lake Michigan and the Chicago Area Waterway System (CAWS).¹⁰⁸ He then held that Congress, in a 1983 enactment, compelled the Corps of Engineers to maintain "through" navigation between Lake Michigan and the Des Plaines River; and that the Corps had no power to contravene the command of Congress by closing the locks, the only path for such navigation. The lake states more or less conceded that congressional approval would be needed, but argued that an injunction could be

¹⁰⁶ Id. at pdf 4.

¹⁰⁷ [1M7](#).

¹⁰⁸ Id. at pdf 2.

temporary, until such time as congressional approval was obtained. This the judge rejected as an attempt by the judiciary to order Congress to enact something so that a public nuisance could be avoided. Judge Tharp summed up by saying it could not be a public nuisance to follow the present directives of Congress.¹⁰⁹ Hence, the plaintiff states had not stated a claim on which judicial relief could be granted.

The plaintiff states appealed to the Seventh Circuit, where oral arguments were heard in early 2014. We await further developments. No one has yet suggested that the struggles of nearly a century to close the Chicago drainage canal are over.

¹⁰⁹ Id. at pdf 27.